



August 4, 2022

Ms. Megan Kuczka
New York State Department of Environmental Conservation (NYSDEC)
Region 9 – Division of Environmental Remediation
270 Michigan Ave.
Buffalo, NY 14203

Re: National Grid Pole Location – Subsurface Investigation
NYSDEC Site #915047 – Republic Steel (LTV)/Marilla St. Landfill
Steelfields Solar Site
102 Marilla Street
Buffalo, NY
LaBella Project No. 2191567.17

Dear Ms. Kuczka:

LaBella Associates, D.P.C. (“LaBella”) is pleased to submit this Subsurface Investigation Work Plan (SIWP) in support of the Steelfields Solar Array project located at approximately 102 Marilla Street in the City of Buffalo, Erie County, New York, hereinafter referred to as the “Site”. The Site is listed as NYSDEC Site #915047.

This SIWP is intended to summarize LaBella’s proposed subsurface investigation activities, goals of this investigation, procedures for encountering waste, and potential landfill breach repair procedures.

PROJECT BACKGROUND

The Site is the former Republic Steel (LTV) and Marilla Street Landfill, which accepted slag, blast furnace dust, oxygen furnace dust, clarifier sludge, precipitator dust, railroad ties, construction and demolition (C&D) waste, and waste oils and acids from 1930 until 1981. The Site has been properly closed, capped, and is monitored on an annual basis.

Source Renewables is currently developing a design to construct a solar array on the landfill cap at the Site. As part of this design, National Grid is set to install utility poles at the Site, outside of the landfill cap, as part of interconnection activities. Prior to utility pole installation, Source Renewables must confirm that landfill waste is not present in the area where utility pole installation is planned. The goal of this subsurface investigation is to confirm that waste consistent with the old Republic Steel (LTV)/Marilla Street Landfill is not present within the proposed utility pole installation area.

PROPOSED SCOPE OF WORK

In order to complete the subsurface investigation, LaBella proposes the following scope of work:

1. Prior to mobilization to the Site, a *Dig Safely New York* stakeout will be conducted at the Site to locate subsurface utilities in the areas where the subsurface investigation will take place. LaBella assumes any relevant utility drawings and/or other information regarding underground utilities will be provided by the owner prior to implementation of subsurface



work at the Site.

2. A direct push soil boring study will be implemented at the Site. Up to one (1) day of borings (i.e., 8-hours on-site each day) is budgeted for this Task. Each soil boring will be advanced to a water depth of 8-ft below ground surface (bgs) or to bedrock refusal. Borings will be advanced within the proposed utility pole location area. The total number of borings is to be determined, but a minimum of six (6) borings will be advanced within the proposed utility pole area to confirm that waste is not present where utility poles are to be installed.
3. Soils from the borings will be continuously assessed for visible or olfactory indications of impairment, and/or indication of detectable volatile organic compounds (VOCs) with a photo ionization detector (PID) with a bulb energy of 10.6 eV. Positive indications from any of these screening methods are collectively referred to as “evidence of impairment.”
4. Exploration locations will be located with a global positioning system or tape measured from existing site features.
5. Soil samples will not be collected or analyzed as part of this subsurface investigation. LaBella’s project geologist will utilize evidence of impairment to determine whether or not waste material consistent with the landfill is present within the proposed utility pole location. Industrial wastes including blast furnace slag, precipitator dust and clarifier sludge are reported to have been disposed of at the landfill. Evidence of impairment and identification of these materials will be used to distinguish between industrial wastes and other fill materials.
6. Community Air Monitoring will be conducted during the investigation work as indicated in New York State Department of Environmental Remediation Technical Guidance for Site Investigation and Remediation (DER-10) Appendix 1A New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan (CAMP). A copy of DER-10 Appendix 1A NYSDOH Generic CAMP is attached.
7. LaBella’s field geologist will prepare boring logs for each boring location, noting types of soil encountered, depths of soil types, whether or not waste is encountered, depth of groundwater (if present), and PID readings.
8. Soil borings will be backfilled with the materials retrieved from the soil boings and supplemented with bentonite chips, if needed.

All subsurface investigation activities are to be completed outside of the assumed landfill footprint. However, LaBella understands that these limits are assumed and not indicative of actual conditions in the field. As such, LaBella has developed the following procedure to be executed in the event that waste material is encountered:

1. Depth and type of waste material will be noted within the boring log for that location.
2. Waste material will be segregated and drummed. Any drummed waste material will be left on-Site for disposal at a later date.
3. If waste material is encountered, LaBella will conduct landfill cover repair activities. This will include:
 - a. Grouting of the borehole using a mix of Type 1 Portland cement and bentonite clay; and
 - b. Filling of the top of the borehole with a sand and gravel mixture to match the existing surface grade at this location.

The grout mix to be prepared will be consistent with standard grout mix requirements for decommissioning monitoring wells, per New York State Department of Environmental Conservation (NYSDEC) Commissioner Policy (CP)-43. Quantities used to repair any landfill cover damage will be recorded, reported to NYSDEC in a summary report, and locations of any repairs will be recorded by GPS.



POST-INVESTIGATION REPORTING

Following completion of this investigation, LaBella will prepare a figure indicating boring locations with borehole nomenclature, a note as to whether or not waste was encountered, and information regarding whether landfill cover repairs were required at each borehole location. Soil boring logs and any disposal receipts (if necessary) will be included in the report.

PROJECT SCHEDULE

LaBella intends on conducting the above scope of work on Thursday, August 4, 2022. This investigation is expected to take one (1) day to complete, and post-investigation reporting is expected to take approximately one (1) week to complete. If landfill cover repairs are executed, these will be reported to NYSDEC Region 9 within 24-hours of field work completion.

We ask that you review the above work plan and provide any questions, comments, or concerns prior to the start of subsurface investigation work.

Respectfully submitted,

LABELLA ASSOCIATES, D.P.C.

Jared Pristach, PE
Environmental Engineer

Attachments

- Attachment 1 – Proposed Subsurface Investigation Area
- Attachment 2 – NYSDOH Generic CAMP

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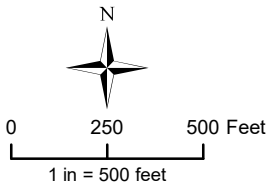
ATTACHMENT 1 – PROPOSED SUBSURFACE INVESTIGATION AREA



Source Renewables

Subsurface Investigation of Landfill Cap

Steelfields Solar
City of Buffalo, NY



- Legend**
- Solar Array
 - Access Road
 - Proposed Subsurface Investigation Area
 - Property Line

Sources:
1. Proposed Subsurface Investigation Area and Access Road:
Created by LaBella using information provided by the client. 2022.
2. Basemap: Bing Maps Aerial. 2022.

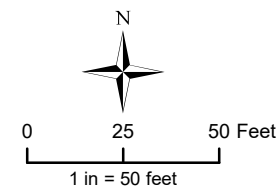
Proposed Subsurface Investigation Area



Source Renewables

Subsurface Investigation of Landfill Cap

Steelfields Solar
City of Buffalo, NY



Legend

- Proposed Subsurface Investigation Area
- Property Line
- Approximate Landfill Cap Boundaries
- Approximate Overhead Electric
- Approximate Underground Electric
- MV Cables to National Grid Pole
- Equipment Pads
- Access Road
- Railroad

Sources:
1. Proposed Subsurface Investigation Area, Approximate Landfill Cap Boundaries, Approximate Overhead Electric, Approximate Underground Electric, MV Cables to National Grid Pole, Emission Lines, and Access Road: Created by LaBella using information provided by the client. 2022.
2. Railroad: NYSDOT. 2013.
3. Basemap: Esri, DigitalGlobe, GeoEye, Earthstar, Geographics, CNES/Airbus DS, USDA, USGS AeroGRID, IGN, and the GIS User

Proposed Subsurface Investigation Area



ATTACHMENT 2 – NYSDOH Generic CAMP

Appendix 1A

New York State Department of Health Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. “Periodic” monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or

overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.
4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed $150 \text{ mcg}/\text{m}^3$ above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than $150 \text{ mcg}/\text{m}^3$ above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within $150 \text{ mcg}/\text{m}^3$ of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

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